

ABSTRACT

A power source circuit includes a power source wiring at a high potential side provided with a first power source voltage and a second power source voltage, a power source wiring at a low potential side and booster circuit as a charge pump installed between the power source wiring at a high potential side and the power source wiring at a low potential side and provided with a plurality of switching transistors and a plurality of capacitors. A control device is provided for controlling the booster circuit. A predetermined number of power sources includes the power source wiring at the high potential side are further provided with the power source circuit. An input voltage is selectively input to a part of the booster circuit from any one of the predetermined number of power sources. The control device fixes all of the switching transistors inputting the predetermined number of power sources except one of the switching transistors and the control device controls the booster circuit to implement a boosting operation by switching the switching transistor not fixed with a predetermined frequency and a predetermined phase relationship so as to switch the input of the predetermined number of power sources and selectively output a predetermined number of output voltages from the booster circuit.